

What is claimed is:

Sub B1
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A speech recognition system, comprising:
a host computer, the host computer operative to communicate at least one graphical user interface (GUI) display file to a mobile terminal;
the mobile terminal including a microphone for receiving speech input;
wherein the at least one GUI display file is operative to be associated with at least one of a dictionary file and syntax file to facilitate speech recognition in connection with the at least one GUI display file.

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2. The system of claim 2, the host computer including a memory, the memory storing a plurality of GUI display files.

3. The system of claim 1, wherein at least one of a dictionary file and syntax file is attached to the at least one GUI display file.

4. The system of claim 1, wherein the dictionary file is stored in a memory of the host computer.

5. The system of claim 1, wherein the syntax file is stored in a memory of the host computer.

6. The system of claim 1, wherein the dictionary file is stored in a memory of the mobile terminal.

7. The system of claim 1, wherein the syntax file is stored in a memory of the mobile terminal.

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8. The system of claim 1, wherein the mobile terminal maps sequences of phonemes to operator instructions *via* the dictionary file and syntax file.

9. The system of claim 1, wherein the at least one GUI display file is communicated via packet format.

10. The system of claim 1, wherein the host computer informs the mobile terminal of the file size of the at least one GUI display file.

11. The system of claim 1 employing a platform independent architecture based on JAVA.

12. A mobile terminal having speech recognition capabilities, comprising:

a processor;

a display operatively coupled to the processor, the display adapted to display at least one graphical user interface (GUI); and

a speech recognition system for identifying speech commands from a user, the speech recognition system operative to employ at least one of a dictionary file and a syntax file associated with the GUI file to map sequences of phonemes to operator instructions;

wherein the scope of speech recognition associated with the dictionary file and syntax file are substantially focused to recognizing utterances which correspond to valid inputs to the at least one graphical user interface (GUI) file so as to minimize data processing requirements of the mobile terminal.

13. The mobile terminal of claim 12 the remote unit including a memory for storing a plurality of GUI display files.

Sub B3 14. The mobile terminal of claim 11, wherein the dictionary file and syntax file are attached to the GUI display file.

15 The mobile terminal of claim 12 wherein the dictionary file and syntax file are stored in the memory of the mobile terminal.

INSCA7 16. The mobile terminal of claim 12 wherein the dictionary file and syntax file are stored in the memory of the remote unit.

17. The mobile terminal of claim 12, wherein the remote device is a host computer.

D4 Sub B3 18. A method for facilitating speech recognition associated with a graphical user interface (GUI), comprising the steps of:

using at least one GUI display file of a plurality of GUI display files to input commands to a unit, the unit adapted to receive input commands *via* speech;

using at least one of a dictionary file and syntax file in connection with the at least one GUI display file, the dictionary file and syntax file including reference data corresponding to commands that may be input to the unit via speech;

wherein the reference data facilitates speech recognition in connection with the at least one GUI file.

Sub B4 19. A data collection network comprising:
a host computer for performing general operations in connection with the network, the host computer including means for sending a graphical user interface (GUI) file to a remote client, the GUI file including display data for prompting an operator to input at least one of a command and data from a limited set of commands and data that may be input via a web page

corresponding to the GUI display file, the GUI further including utterance recognition data for recognizing a limited quantity of utterances associated with the limited set of commands and data that may be input via the web page; and

a remote client operative to receive the GUI file from the host computer system, the remote client including a microphone for receiving operator utterances, and a memory for storing the GUI file, the remote client further including an utterance recognition system which employs the utterance recognition data to facilitate speech recognition of utterances relating to the GUI file.

20. A remote client computer operative to receive a graphical user interface (GUI) file from a remote host computer, the GUI file including display data for prompting a user to input at least one of a command and data, the GUI file further including utterance recognition data which facilitates speech recognition of a limited quantity of utterances associated with a limited set of commands and inputs that can be input to a display generated from the GUI file.

21. A graphical user interface file operative to be transmitted from a first device to a second device, comprising:

an HTML file for facilitating generation of a web page display on the second device; and

at least one of a dictionary file and a syntax file to facilitate speech recognition of utterances made to the second device;

wherein the contents of the dictionary file and syntax file are specific to recognizing valid utterances in connection with the web page display.

22. A data collection network comprising:

a host computer operating a data collection application manipulating data received from a plurality of mobile computing devices;

a mobile computing device operating a data collection application generating a plurality of graphical display contexts prompting user data input and associating with each graphical display at least one of a dictionary file and a Syntax file including reference data corresponding to at least one of a limited permutation of data and commands which may be input via speech in each context and transmitting data to the host.

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